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AFFILIATED CLUB



AMATEUR RADIO
STATION W60TX

VOL. XIX

1977

PAARA GRAPHS

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

MENLO PARK CIVIL DEFENSE RADIO CLUB, K6YQT

Mar. 75

OUR NEXT MEETING: will be on Friday, March 7, 1975, in the lovely, decorative Menlo Park Recreation Center, right next to all the Big Sounds of Teeny-bopper music! Yes. Starts at 7:30PM and lasts till about 10:00.

THE PROGRAMME: is a guided tour into the worlds largest and oldest Resonant Cavity! WE'VE GOT George Oetzel and Lambert Dolphin from Stanford Research Institute telling us about their Egyptian expedition into Cheop's tomb!! Will be telling all about their attempt to find the old king's burial site with HF energy pulses, as a sort of radar. With a High-Class Color slide show of the pyramids, rated PG. (PG= Pyramid Guide, no one under 16 admitted without their mummy). Come learn the Secrets of the ancients.

Coffee Cakes Cookies Goodies Raffle Many Hats Gonk
*****Everyone is Invited*****

*****Everyone is Invited*****

* * * * *

THE PAARA BOARD OF DIRECTORS will meet on the usual Wednesday following the meeting, on Wed., March 12, 1975, at the equally usual time of 7:32.85 PM. Meeting place is the infamous, well-worn, slightly leaky W60TX trailer in the SRI parking Lot, 333 Ravenswood, Menlo Park.

Check into the PAARA Net and be instantly relieved of (a) the heartbreak of psoriasis (b) gastronomical indigestion and (c) Nervous tension headaches. Only the PAARA net contains exclusive Buffers to Keep You Going! Yes indeed. This rather high-class and gabby group meets on 145.24 MHz, plus or minus a little bit, at around 8:07 PM on Wretched Monday nites. Come join the gang and fill us in on your latest activities.

W6QIE Sends Code Practice Transmissions on 3590kHz every
Tues thru Sunday evenings, starting at 8:00 PM local.

W6ZRJ sends ARRL bulletins on the 1st and 3rd Tuesdays,
7:30 PM on 3590 kHz and 7090 kHz, CW. Also 8:30 PM
on 3815 kHz SSB. Also blasts away on good old RTTY
60 wpm 120 Hz shift on 2615 kHz at 9:00 PM.

You Paid up your Dues?? This may be your Last Issue (snif!)
Check elsewhere for list of Hearty Paid-Up Members!!!

5
PAARAGRAPHS IS THE OFFICIAL ORGAN OF THE PALO ALTO AMATEUR
RADIO ASSN., AND THE MENLO PARK CD RADIO CLUB.

VOLUME 19

NUMBER 3

MARCH

1975

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VICE PRESIDENT: ANDY KORSACK VE3FZK/W6

SECRETARY: HAL MOORE W6DEF

TREASURER: PAUL CHURCHILL W6QBY

TRUSTEE OF WSOTX: FRED CANHAM KSYT

TRUSTEE OF KSYQT AND M.P. RADIO OFFICER: BOB ALLEN W6WQD

PROPERTY CUSTODIAN: ED FAIRBANKS W6AIN

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POLICIES:

-
1. MEMBERSHIP INCLUDES PAARAGRAPHS SUBSCRIPTION.
 2. DUES ARE A MERE \$4.00 PER YEAR
 3. \$1.00 WILL GET YOU PAARAGRAPHS FOR A YEAR
 4. TRY TO PAY ON A CALENDAR YEAR BASIS

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--PAARAGRAPHS STAFF AND RELATED PERSONAGES --

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SEND ALL YOUR ARTICLES, COMMENTS, PROJECTS, STATION NEWS,

EXCITING EVENTS, OR OTHER GOOD GONK TO: RICK FERRANTI

WA6NCX, 1234 SANTA CRUZ AVENUE, MENLO PARK 94025

(415) 324-1539

REPORTS ON.....

Club Meeting Friday February 7, 1975: A motion was made, seconded, and approved unanimously that we renew our membership in the CCRC, at the horrendous cost of \$6.00¢. A delegate will report progress of the CCRC at our meetings. A CCRC Hanfest picnic is planned with a tentative date set for Sept. 15th.

The Board Meeting, W6OTX trailer, Feb. 12, 1975:

Attending were Fred, K6YT, Paul, W6QBY, Ed, W6AIN, Andy, VE3FZK/W6, Terry WB6GRZ, Gerry WA6LNV, Hal W6DEF.

A list of members who have paid up their dues will be made up and published. See elsewhere in this issue.

There is a possibility that we may replace our "Family" heirloom, the W6OTX trailer. (I almost hate to see the old monster go....) Investigations to follow.

We acknowledge with thanks the gift of the tri-band antenna from Tiff W6GNX. It will be ready for Field Day.

An effort will be made to speed up the business part of the meeting, along with the coffee break and raffle-ticket sales, so that there is adequate time for the evening's guest speaker to give his talk.

Discussion between Fred and Andy about the future programs this year, with special emphasis on the field tours usually given during the summer months.

Discussion by Andy on the article in Feb. 75 QST called the Contester. This is by way of a computer. (All I can say is What Next??? . Holy Schnolinks!!!)

One member of the Board suggested that some other reason should be given and used for checking into the nets, besides the usual ARRL bulletins. What Say??

De Hal, W6DEF.

Don't forget that Hal, W6DEF, is a regular member of the Northern California Net and can send messages all over the country for you. Let an old friend know you're still alive and send him a message via Hal.

THE SET, Simulated Emergency Test, Redwood City, Menlo Park area, January 25 and 26, 1975.

The final tally of the SET score is 474 points which is 43 points better than last year's score. A number of messages were taken and delivered by the operators at

K6YQT. Two operators took part but did not originate any traffic. K6YQT used emergency power their entire time on the air, all of which added to the score. Dr. Bob Wallace, K6OL combined an earth-quake warning with the SET, and operators of K6YQT took his messages, delivered them, and got answers which were transmitted back to him. He is Chief Scientist of the U.S. Geological Survey, and during the SET he toured the San Andreas Fault with his mobile station.

Just about the happiest fellow was Dave WB6JFH who had his first experience delivering and originating traffic-- via wheel-chair mobile, no less! In Redwood City Dusty, K6MPN operated W6WWJ the entire time they were on the air. Ken K6DRN and Dick K6ANN assisted.

Portola Valley had a fine demonstration under the leadership under Dan W6QNB and others at the Town Hall. The Disaster Committee there witnessed the demonstration and commented that it was very informative. Dan is to be commended for his hard work.

Eight of the SET participants were winners of the little contest the EC Hal W6DEF set up. The trick was to find the meaning of the word "triskaidekaphobia". The winners were Terry WB6GRZ, Andy VE3FZK/W6, Willard W6GNX, Vance W6FLE, and Ken K6DRN, Al W6TFT, Pres K6WD, and Jim WA6NIL. Each will receive five pretty pictures that they will admire. Presentations will be at the next PAARA/Menlo Park CD club meeting, Feb. 7. (They were awarded five 10¢ postage stamps!)

The Emergency Coordinator could only give seven out of ten honest quality points. One of these years, if we keep trying, we will reach the ten point goal.

de Hal

W6DEF, E.C. for our area.

****_*****_****

IS YOUR CALL HERE??? IF it is NOT, you should pay your DUES! PAID-UP MEMBERS for 1975: W6AIN, K6AL, W6AQL, WN6ATL, W6BFH, WN6BQY, WB6CAA, WB6CRN, W6CUN, W6DEF, WA6DVI, K6DHS, W6EM, WA6EQA, WA6EQH, W6FLE, K6FS, VE3FZK, K6GDH, W6GNX, WB6GRZ, K6GT, WA6GVP, W6ISQ, WB6JFH, WN6JFN, WA6LIJ, WA6LNV, WA6LVI, WB6LVP, WA6NCX, WN6NGY, W6NIR, WA6OPA, W6PGQ, W6PFC, G3PPE, WA6PSA, W6QBY, K6RB, (flung over to page 8).....

The Story you've been waiting for!!!

HOW HAM RADIO GOT ITS NAME

A Preposterous Piece of Picturesque Prose by R. Louis
Ferranti, WA6NCX

IN the annals of amateur radio history there has always been much confusion and bickering about the origin of the ubiquitous phrase "ham radio". PAARAGRAPHS dares to publish this original story exposing the truth about two words whose meaning has been, until now, forever clouded by the mists of history.

The obscure, early days of the wireless art saw many early experimentors whose names now evade memory. One such name was Samuel Raideo, a resident of the quaint town of 25 m.p.h., New Mexico. Old Sam was often disposed to experimenting about with all sorts of minerals for use in detecting the newly discovered wireless waves. He had sliced up a nice hunk of sillicon into three disks and miraculously (to him, at least) managed to solder wires to these pieces of mineral. However, when Sam went outside to check if the U.S. Postal Dept. had delivered any more lawsuits against him for his antenna tower, he inadvertently left a dry coffee pot on the gas stove, immediately causing a small fire in the vicinity of his workbench. Although Sam put the blaze out with a goodly shake from a nearby box of Bug-geta snail bait (it's arsenic kills anything, including fires), he was horrified to see his three silicon disks all gunned together with only three wires projecting therefrom, one from each disk.

That evening Sam was trying to see if this goopy mess would still detect wireless waves. Whilst hooking up the wires in various configurations with some battery juice as bias, he was amazed to find that the messy blob of silicon not only rectified, it amplified! Sam immediately named the device (he hadn't the foggiest idea why it operated) the Fire-Engulfed Three-wire (F.E.T. for short, no doubt a hapless quirk of History!)

At that time in Sam's neighbouring community, Sunwear, Utah, there had begun a contest concerning the wireless art. It was believed that the less the filament voltage one

had to apply to a vacuum tube for a given amount of amplification, the better the tube, since it would be more efficient. Old Sam quickly entered the contest with his F.E.T. People sneered at his entry, but once he applied a bit of bias to the thing it faithfully took off and amplified better than any tube! The judge, in running down the list of winners, announced the name and filament voltage for each entry. The crowd gasped when they heard:

"Sam Raidee - 0"

Unfortunately, an itinerant newspaper reporter, on seeing the frightful reaction of the crowd, hastily jotted down the winner's name, confusing it with the lack of voltage on the non-existent filament. Further corruption by equally zero-minded newspapermen gave us the now-familiar phrase "ham radio".

Oh yes -- what of the infamous "Tri-wire"? Well, it got dropped and lost on the way back from the contest, and attempts to make another one failed miserably. (One such attempt resulted in Sam's whole homestead burning down, including the antenna tower, much to his neighbor's delight). So somewhere in 25 n.p.h., New Mexico, is the first three-legged fuse. And all it took was a bit of silicon, a fire, and a goodly supply of Bug-geta....

(As one of my relatives would say: Howsa that for a lotta Bull?!!)

-

FOR SALE FOR SALE FOR SALE:

Tri-band Trap Beam, 10-15-20 meters. Made of heavy duty dural tubes and Teflon Traps, beautiful \$75.00

Yaesu Transceiver in excellent condition: \$350.00

Heath VTVM complete with RF probe and High Voltage Probe for TV. \$35.00

Want: Plate transformer 120/220 v. primary, Secondary either bridge or full wave for 3000 volts @ $\frac{1}{2}$ to 1 Amp.

Trades considered on everything! CALL Irv Wolfe W6HHN, at home at 494-1791. Please note the phone and call was Botched Up by Ye Editor last issue. Now Correct!

PAARAGRAPHS-----ALWAYS TRUE BLUE

List of Paid-Up members for 1975 continued....(from page 5)
 WA6ROM, W6TEW, W6TFT, WA6UIM, W6UOK, W6UXO, W6VYC,
 WA6VZZ, K6WD, K6YT. Walt Harper and Fred Wicknan.

ADD members left out of the roster:

Sy Stein, WA6ROM, 13080 Lorene Ct. MV 94040 967-0362

A.W. Russell, W6TFT, 2505 Hopkins Ave RC 94062

Earl E. Hickman, Jr. 367 Rutherford Ave RC 94061.

SEND your dues money to PAARA box 911 Menlo Park 94025
 or give it to the treasurer at our next meeting.

A Report on the ARRL Pacific Division Meeting, December 7

As edited by PAARA delegate

MOTIONS:

Steve Stuntz, K6FS

Motion 1: Jim Maxwell, W6CUF, proposed that the ARRL
 General Manager establish on a trial basis a Head-
 quarters New Product Committee.

Motion put to vote and passed, 29 yeas, 3 nays.

Motion 2: It was proposed that the General manager of the
 ARRL study the feasibility of publishing as a re-
 print the first 15 years of QST.

Passed unanimously by vocal vote.

Motion 3: It was moved by H. Paul Seuch, WA6UAM of Micro-
 net that the ARRL establish a VHF/UHF/Microwave com-
 mittee to coordinate league programs which would affect
 radio amateurs engaged in direct communications
 above 50MHz. Passed by a vote, 30 yeas, 3 nays.

Motion 4: It was moved by Jim Lomansey, WA6NIL, of the
 Foothills Amateur Radio Society, That ARRL club
 affiliated status be clarified. W6UAM made a se-
 conded amendment that the ARRL headquarters notify
 a club when the club is placed on inactive status.

Motion put to vote and lost 15 yeas, 16 nays.

Motion 5: It was moved by Hugh Cassidy, WA6AUD, of the
 Marin DX Club, that the ARRL start a cumulative index
 for QST to cover the years from 1962 onwards. Passed
 by a vote of 27 yeas and 3 nays.

Motion 6: It was moved by Art Mayoff, VE2AQV/W6, of MDARC,
 that the ARRL endorse, publicize, and promote the
 Sister City Concept for the advancement of the Amateur
 Radio Public Service image. Passed, 33 yeas, 0 nays.

con't next page:

- Motion 7: That the ARRL provide financial support for the Sister Cities Program. Would include brochures, booklets, incorporation of the program into the operating sections of the Handbook, etc. Passed 23 yeas to 13 nays.
- Motion 8: Moved by Art Mayoff, of MDARC, that the League be more responsive to its members. Passed Unanimously.
- Motion 9: It was moved by Charles Breeding, K6UWR, SCM of the East Bay Section, that the ARRL establish a special WAS for the 1976. Put to vote and passed unanimously.
- Motion 10: Moved by Hugh Cassody WA6AUD, of the Marin DX club, that the problems of traffic needs, and emergency preparations be handled by the present ARRL Communications Dept., and another department be set up to administer contest activities, Dx, and other minor activities. Passed by 21 Yeas and 11 Nays.
- Motion 11: It was moved by Howard Krawetz, WA6WUI, of SPARKS, that: The term Amateur Radio be changed to something like Public Service Radio in order to enhance desirability of our service to the general public. Motion died due to lack of a second.
- Motion 12: It was moved by Mark Nelson, WB6NHF, of the Humboldt Radio Club, that the ARRL section lines for Northwestern California be studied and redesignated. Tabled on a vote of 26 yeas and 1 nay.
- Motion 13: It was moved by Jim Longaney, WA6NIL, that in view of the success of Field Day and poorer success of the SET, we should consider changes in the SET to make it more like Field Day. 2 yeas, and 22 nays.
- Motion 14: Moved by W6ISQ and seconded that the most important problem facing us now is the outcome of the 1979 WARC. It is proposed that all ARRL Board of Directors bear this uppermost in mind when planning and supervising League action. Passed Unanimously.
- Motion 15: By Ralph Saroyan, W6JPU, SCM of San Joaquin Valley, that ARRL members consider making a bequest in their wills leaving \$100.00 or more to the ARRL Foundation. Motion was passed unanimously.
- Motion 16: Moved by Bob Thompson, K6SSJ, and seconded, that the meeting go on record as expressing confidence in continuing endeavours of the Directors to faithfully represent the interests of the Pacific Division, at Board Meetings and League functions. Passed Unanimously.

A LOW-NOISE TWO METER PREAMP

de Terry Conboy WB6GRZ

IF your 2 meter receiver seems to need a double dose of Geritol, perhaps a low-noise preamplifier could save it from an early grave. If you already have crossmod problems, fix them first, or forget using any additional gain.

This circuit uses a popular dual-gate MOSFET. They have low noise figure, high gain and fairly good overload performance. Many circuits have appeared using 3N140 or 40673 FETs, but they are often incorrectly biased. Usually the drain current is too low and internods are increased, as is input noise. Best performance is obtained with approximately zero bias on Gate 1. Adjustment is easy, simply peak the input and output circuits.

Best noise figure can be had by device selection and source impedance tweeking, but the improvement may be slight. A point often mentioned, but seldom remembered, is that maximum gain (i.e. impedance match) and lowest noise almost never occur for the same transformer ratio at the device input. In this case, the impedance driving the gate is lower than the input Z, causing a loss of 1 or 2 dB of gain to get the lowest N.F.

Good Taste Schematic ----->

DO YOU have ESP?? (Or better, do you have our stuff??!!)

Then you can help us with information as to the whereabouts of the following club gear:

PAARA-136 Homebrew Low-Pass Filter

PAARA-54 Johnson Adventurer Transmitter 80-10 Meters

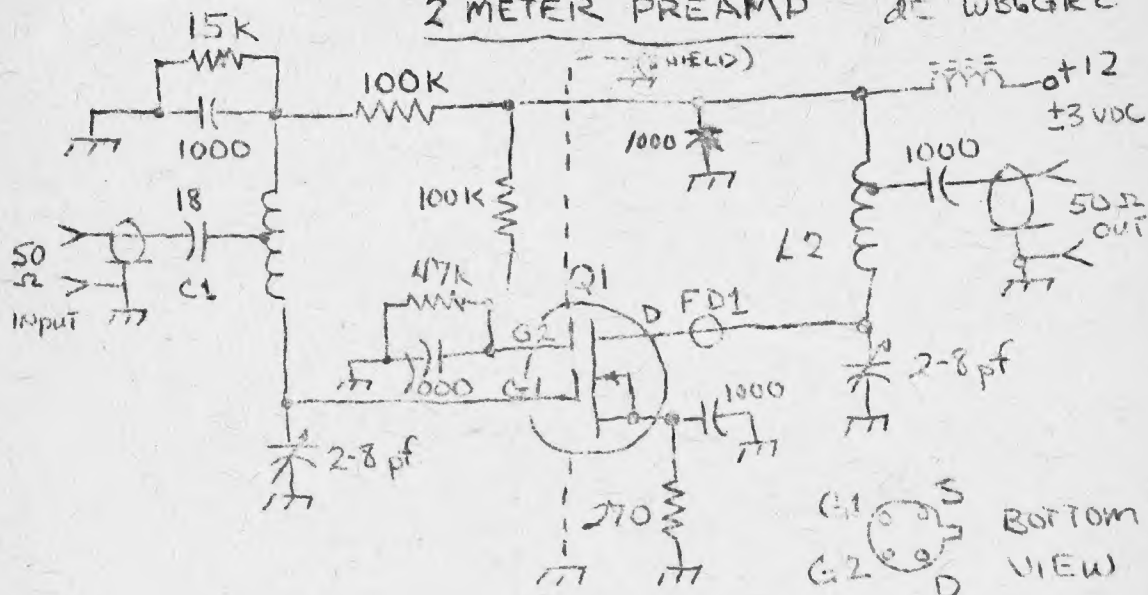
PAARA-66 Tube tester--Electronics Measurement mod. 200

Drop a note to our mailbox -- or tell Ed W6AIN about your discoveries at the next meeting or on the PAARA net.

Many thanks to Tiff, W6GNX, in Menlo Park, who has donated a 4-element Tri-band Beam antenna to our club. TNX!!

RE: the Restructuring Docket 20282: League members should keep their directors informed of their reactions & views. Write Doc W6ZRJ or catch him on the air some evening!

DE WBLGRZ.



C1 Mica or ceramic 18 pF

L1 4 turns #16, 3/8" I.D., 1/2" long, tap at 1-2/3 turns from the cold end.

L2 4 turns #16, 3/8" I.D., 1/2" long, tap at 1 turn from the cold end.

FD1 Small ferrite bead (or use a 10-ohm $\frac{1}{4}$ -watt resistor instead of the bead)

FD2 4 turns #26 on a ferrite bead (or use a 180-ohm resistor instead of the bead)

All resistors are 1/10th watt or more.

GAIN=16 dB \pm 2 dB at 146 mHz RESPONSE: \pm 1 dB over 4 mHz

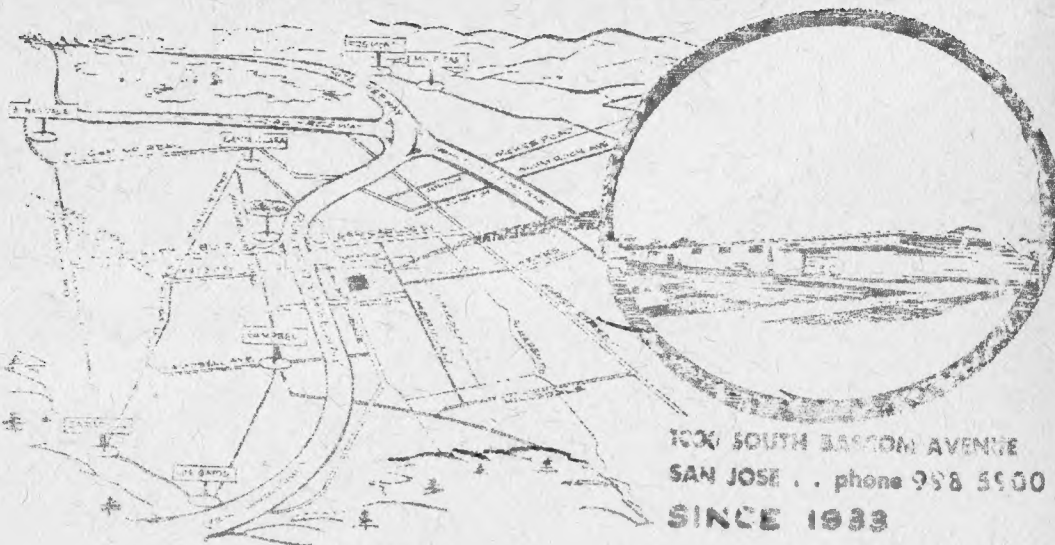
Noise Figure: 2.5 ± 0.5 dB Current: 7 ± 2 mA.

Mount all bypass caps with short leads as close to L1, L2, and Q1 G2 and S as possible.

L1 and L2 must be isolated from each other by space or a shield...mount at right angles to each other.

3N140's are destroyed by static charges--short leads with a piece of solder wrapped around them when putting in socket or fine wire if soldering into circuit.

Another PAARAGRAPHS original circuit! Tnx Terry...



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